Product Specification

Internet Telephony PBX system

IPX-1000

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Change History:

Revision	Date	Author	Change List
Version 1.0	August 28, 2004	Jimmy Lin	Initial release

Author	Jimmy Lin	Editor:	Jimmy Lin
Reviewed by:	Tom Shih	Approved by:	Tom Shih

1. PRODUCT DESCRIPTION

As the growth of broadband communications turns more and more popular, deploying VoIP peripherals is gradually essential for users.
With years of Internet telephony and router manufacturing experiences, PLANET proudly introduces the latest PLANET VoIP product – Internet PBX system – IPX-1000.
The IPX-1000 is a full-function PBX system with extra built-in features, such as auto-attendant, voicemail, VoIP, and various network services. IPX-1000 provides a solid, uniform platform for both voice communications as well as data network communications. Based on state-of-the-art embedded technology, IPX-1000 offers a seamlessly integrated solution for the telecommunication needs in modern times.
IPX-1000 is an ideal choice of cost saving solution for SOHO and SMB. IPX-1000 provides 2 CO lines (FXO interface, also called outside lines or trunk lines) and 4 extension lines (FXS interface, also called inside lines or station lines). All these telephony ports are analog with no special and proprietary hardware limitations for connections. Furthermore, IPX-1000's conventional telephony functions are implemented over the POTS (Plain Old Telephone Service) wiring infrastructure.
IPX-1000 does not utilize the network for conventional telephony functions, so it adds no load to the network and is not subject to network conditions/failures.
Conventional telephony features such as auto attendant, voicemail with personal greeting message, automatic roll over, call forwarding, CO line usage logging, and toll restriction in IPX-1000 not only maintain the existing telephony system, but also introduce the new infrastructure into the communication field. VoIP functions are transparently integrated with conventional telephony functions in the IPX-1000 design, and an uniform user interface is provided for both conventional and VoIP functions. Besides, IPX-1000 provides router service, IP sharing (NAT), firewall, DHCP server and QoS support to meet all the demands in your office network.

2. PRODUCT FEATURES

- **VoIP quality with QoS (Quality of Service) support**
  With guaranteed bandwidth network QoS management, IPX-1000 provides superior voice quality in a congested network environment.
- **Distributed VoIP network infrastructure**
  Based on the distributed architecture concept, VoIP extensions in IPX-1000 are off-premises extensions reachable through VoIP peripherals. You can call a VoIP extension by dialing a simple extension number as if you are dialing a local extension
- **Off-net calling capability, call restriction, call access control**
  Off-Net Security controls in IPX-1000 can prevent improper VoIP usage and all incoming Off-Net calls with unknown privilege. If the incoming Off-Net calls are with unknown privilege, VoIP administrator may ensure the proper usage of your VoIP and save your cost.
- **Replaces old PBX directly without requiring any new wiring to be put in.**
  Telephony interfaces in IPX-1000 are analog ones, no special or proprietary hardware is required to build up the connection, IPX-1000 saves the TOC for SOHO and SMB.
- **Intuitive, ease-of-use web machine management**
  The network administrator can configure and manage IPX-1000 via standard web browser anywhere around the world.

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

CPU:	SAMSUNG ARM S3C2410X01
RAM:	SAMSUNG K4S561632D –TC75 x 2 64 Mbytes
FLASH:	SAMSUNG K9F5608U0C –YCB0 32 Mbytes
Switch:	ADMTek ADM6609
DSP	Audio Codes AC483-C
RAM:	ICSI IS61LV6416-10T x2

LAN	4 (10Base-T/100Base-TX, Auto-Negotiation)
WAN	1 (10Base-T/100Base-TX, Auto-Negotiation)
Telephony ports	6 RJ-11 (4 FXS for extension, 2 FXO for CO/PSTN line connection)
Protocols and Standards	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) RFC 768 UDP RFC 783 TFTP RFC 791 IP RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 1034, 1035 DNS RFC 2136 DDNS RFC 1631 NAT RFC 2068 HTTP RFC 2131 DHCP RFC 2516 PPPoE
Cabling	10Base-T - 2-pair UTP Cat. 3, 4, 5, up to 100m (328ft) 100Base-TX – 2-pair UTP Cat.5, up to 100m (328ft)
Management	Web
Internet Connection Type	Fixed IP, PPPoE, DHCP, DHCP with host/domain name
Maximum Clients	30
Access Control Policy	32
Virtual Server	32 entries
Dynamic DNS	1
WAN port MAC address	Manually configure
MAC Access Control	Yes
Other feature	Remote Management
Call control	H.323
Voice CODEC support	G.723.1 ACELP/M-MLQ (5.3, 6.3kbps), G.729A CS-ACELP (8kbps)
Voice processing	Voice Active Detection, DTMF detection/generation, G.165/G.168 echo cancellation (ECN) (16mSec.), Comfort noise generation (CNG), Gain Control
Voice CODEC support	G.723.1 ACELP/M-MLQ (5.3, 6.3kbps), G.729A CS-ACELP (8kbps)

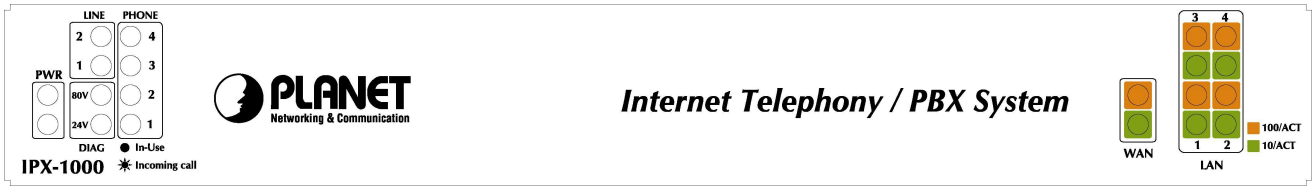
3.2PHYSICAL SPECIFICATION

Dimensions

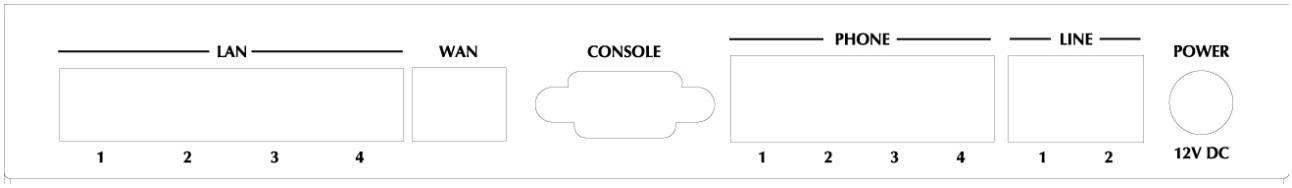
132 (W) x 215 (D) x 30 (H)

Weight

554 g (net weight)



IPX-1000 Front panel



IPX-1000 Rear panel

LED Function

Indicator	Color	Activity	Indication
PWR • 80V • 24V	 Green Green	 On On	Power is supplied to the gateway.
LAN • 10/ACT • 100/ACT	 Green Orange	 On On	Data is presented on LAN. The gateway is connected to LAN.
WAN • 10/ACT • 100/ACT	 Green Orange	 On On	Data is presented on WAN. The gateway is connected to WAN.
LINE Voice Channels 1-2	Green	Off On Blinking	The line is idle. The line is being used. The line is ringing.
PHONE Voice Channels 1-4	Green	Off On Blinking	The line is idle. The line is being used. The line is ringing.

3.3 ENVIRONMENTAL SPECIFICATION

Operating

Temperature: 0~50°C
Relative Humidity: 10~90%(non-condensing)

3.6 BASIC PACKAGING

- IPX-1000 unit
- Power adapter
- Quick Installation Guide
- User's Manual CD

PACKAGING INFORMATION

- Dimension

  323 x 197 x 80 mm (W x D x H)

- Weight

  1355 g (gross weight)